

U.S. Department of Transportation

# Intelligent Transportation Systems

**Standards Fact Sheet** 

IEEE Std 1404 - 1998

January 1999 Guide for Microwave Communications System

**Development** 

# Overview

Traditionally, electronic systems for transportation-related construction and maintenance projects have been stand-alone systems that did not require system-to-system communications. These systems have not been designed and fielded as "open systems." With the advent of the Intermodal Transportation Efficiency Act of 1991 (ISTEA) and the establishment of the National ITS Architecture, requirements were imposed on system control environments to provide a capability to communicate over a wider geographic area that includes many discrete traffic management systems.

This guide provides traffic managers with information relating to wideband microwave communications systems that support traffic communication needs.

#### What is this standard for?

This standard provides guidance on developing a terrestrial microwave system. It includes guidance on design, procurement, construction, maintenance, and operation of such systems.

To obtain a copy of this standard, please contact:

# Institute of Electrical and Electronics Engineers (IEEE)

445 Hoes Lane, P.O. Box 1331 Piscataway, NJ 08855-1331 Tel: (732) 981-0060 or

(800) 678-IEEE Fax: (732) 981-9667 Web site: <u>www.ieee.org</u>

E-mail: <a href="mailto:customer.service@ieee.org">customer.service@ieee.org</a>

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## Who uses it?

This guide is intended for use by traffic managers, traffic engineers, and communications engineers involved in the specification, selection, procurement, installation, operation, or maintenance of microwave communication systems.

### How is it used?

This document is used as a step-by-step guide and checklist for the life cycle of a microwave communications system for the non-technical manager and purchasing agent, as well as the experienced communications engineer and technical manager.

#### Scope

This guide was developed in accordance with traditional microwave development methods. It addresses the requirements specific to the design, procurement, construction, maintenance, and operation of a microwave communications system. The systematic approach presented is generic and basic, covering project elements instead of detailed specifications and procedures. It is not intended to be used as the only source of guidance. Reference is made to documents that are essential to the proper engineering of microwave communications systems.

#### Related documents

None.